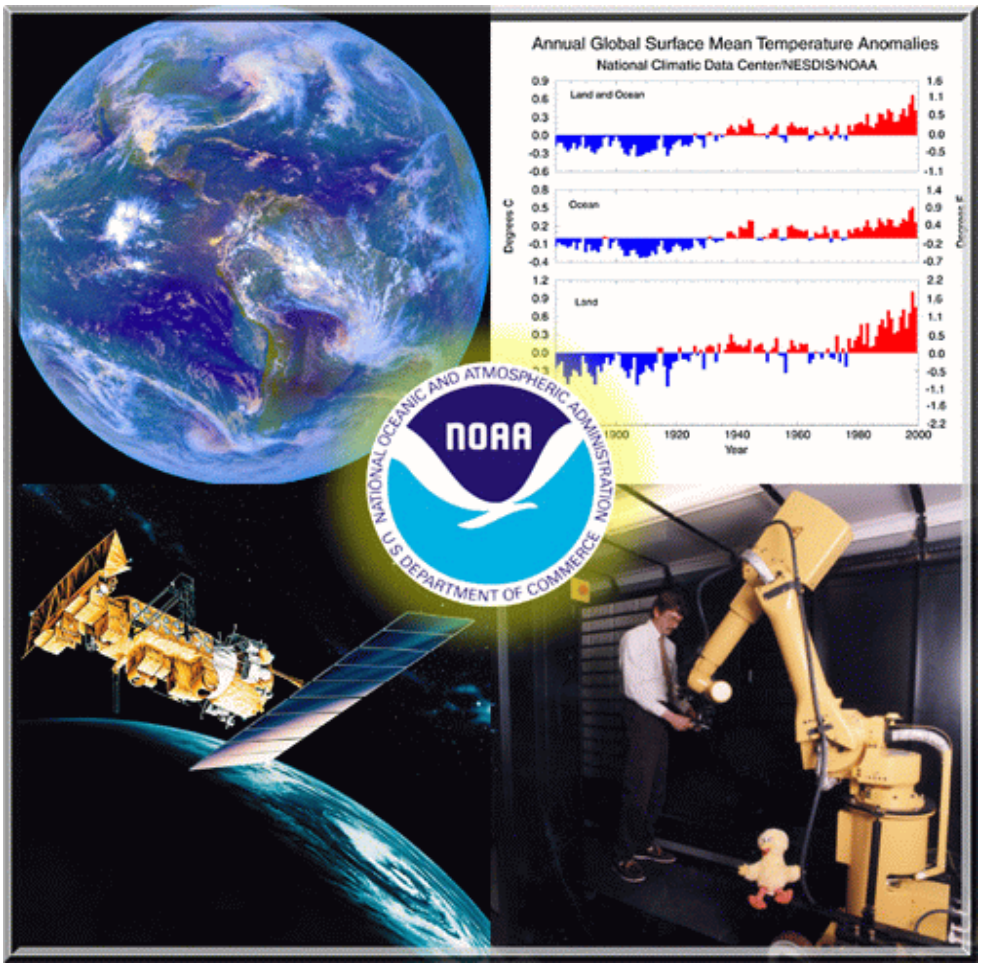
Revised February 7, 2001

National Environmental Satellite, Data, and Information Service



FY 2001 Operating Plan

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National Environmental Satellite, Data, and Information Service

FY 2001 Operating Plan

1.0 Program Information/Planned Accomplishments

NESDIS maintains a system of polar-orbiting satellites that obtain global environmental data and maintains a system of geostationary satellites that provide near-continuous observations of the Earth's western hemisphere. NESSDIS monitors the Earth's surface and space environment conditions; introduces improved atmospheric and oceanic observations and data dissemination capabilities; and develops and provides new and improved environmental applications and products for a wide range of Federal agencies, state and local governments, and public users.

NESDIS also provides worldwide environmental data and information products and services in the atmospheric, climatic, oceanic, solid earth, and solar-terrestrial sciences to meet the needs of users in commerce, education, industry, agriculture, science and engineering, the general public, and Federal, state, and local agencies. These products and services are used in decisions critical to the national economy; national defense; industrial productivity; energy development and distribution; world food supplies; public health, safety, and welfare; and the sustainment and development of natural resources.

NESDIS manages the following programs in support NOAA's Strategic Plan (by Strategic Plan element):

1.1.0 Polar-Orbiting System / ASTWF

1.1.1 Objectives

In FY 2001, NESDIS will launch one DMSP satellite (F-16), determine the need to launch NOAA-M, complete design and development studies for critical NPOESS sensor suites, continue total system design studies and ground system prototyping for NPOESS, and continue significant and critical discussions with our European partners.

1.1.2 Performance Measures

	1999 Actual	2000 Estimate	2001 Estimate
POES and DMSP global temperature and water vapor profiles collected (millions) **(B)**	300.0	400.0	500.0
POES cloud cover images collected **(B)**	40,000	40,000	40,000
Collections from remote terrestrial and marine observation ARGOS platforms (millions) **(B)**	4.2	4.4	4.6
Remote ARGOS platforms in service end of year **(B)**	6,400	6,700	7,000
POES global ozone measurements collected **(B)**	485,000	485,000	485,000
Emergency locator signals collected from aircraft and ships in distress **(B)**	21,200	22,300	23,400
Emergency beacons in service at end of year **(B)**	804,000	839,000	875,000

(B) NOAA Budget Submission

Proposed New Performance Measures

Number of operational polar-orbiting operational environmental satellites (POES) in orbit

Delivery of critical instrument data to CEMSCS within 120 minutes

Number of new, required operational data sets and/or products provided to NWS and other users

1.1.3 & 1.1.4 Milestones and Activities

- Complete analysis to determine the optimum launch date for NOAA-M (11/00) [OSD-Mignogno]
- Host multilateral discussion among operational and research agencies on contributions to a future polar observing satellite system (12/00) [IA-Smith, A-Withee]
- Complete Siting and Security Requirements Studies for NOAA Satellite Operations Facility (12/00) [OSD-Reynolds]
- Deliver flight qualified set of U.S. Instruments to EUMETSAT for integration on MetOp-1 (12/00) [OSD-Mignogno]
- Conduct initial contractor demonstrations of ground system design, prototyping, and total system architecture for the NPOESS Program Definition and Risk Reduction (PD&RR) effort (12/00) [IPO-Cunningham]
- Conduct launch of DMSP (S-20/F-16) using the integrated NOAA SOCC for primary launch control (2/01) [IPO-Nelson, OSO-Kelly]
- Complete Metop Data Denial Implementation Plan version 1 with EUMETSAT and DOD (3/01) [IA-Masters / OSD-Davis]
- Upgrade Satellite Active Archive to receive DMSP F-16 SSMIS data (4/01) [OSDPD-Kidd]
- Conduct, with NASA, Mission System Design Review (MSDR) for the joint IPO/NASA NPOESS Preparatory Project (NPP) (6/01) [IPO-Nelson]
- SOCC operational in new Control Center FB-4/0200 Wing (8/01) [OSD-Reynolds, OSO-Kelly]
- Complete implementation agreement with Norwegian Space Centre for high-latitude satellite tracking and data acquisition support for the NPP and NPOESS programs (9/01) [IA-Beckman/Marzin / IPO-Cunningham]

- Complete review and approval of the NPOESS Integrated Operational Requirements Document - II (IORD-II) by the Joint Agency Requirements Council (JARC) (9/01) [IPO-Nelson]

- Launch NOAA-M (9/01) [OSO-Kelly, OSD-Davis]

1.2.0 Geostationary System / ASTWF

1.2.1 Objectives

In FY 2001 NESDIS will launch GOES-M, continue sensor development for N-O, and initiate procurement of advanced ABI/ABS instruments which are planned to be operational beginning in the 2008 time frame.

1.2.2 Performance Measures

	1999 Actual	2000 Estimate	2001 Estimate
Number of severe weather systems tracked **(B)**	180	180	180
Number of GOES DCS collections from remote platforms **(B)**	34.2M	34.5M	34.8M
Number of GOES DCS platforms in service end of year **(B)**	15,175	15,782	16,413
Sustain spacecraft operations and ability to process data	92%	92%	92%
Percent of time devoted to severe storm tracking **(B)**	30%	30%	30%

(B) NOAA Budget Submission

Proposed New Performance Measures

Number of operational geostationary satellites in orbit

Percent of GOES satellite critical instrument data transmitted in near real time

Number of new, required operational satellite data sets and/or products provided to NWS and other users

1.2.3 & 1.2.4 Milestones and Activities

- Award formulation phase contracts for GOES Advanced Baseline Imager (5/01) [OSD-Dittberner]
- Launch GOES-M (7/01) [OSO-Kelly, OSD-Dittberner]
- Procure all ground station hardware for Meteosat Second Generation (7/01) [OSDPD-Paquette]
- Perform GOES-M post launch test and activate SXI (9/01) [OSO-Kelly]

1.3.0 Environmental Observing Services / ASTWF, ISICF, DEC-CEN, SHC

1.3.1 Objectives

In FY 2001 we will expand operational products, continue with remote sensing, and develop new data products.

1.3.2 Performance Measures

	1999 Actual	2000 Estimate	2001 Estimate
Number of GOES quantitative precipitation estimates produced **(B)**	1,400	1,400	1,400
Accuracy of quantitative precipitation estimates **(B)**	75%	75%	75%
Number of global ocean surface winds **(B)**	52.0M	70.0	73.4
GOES Satellite-derived winds (Western hemisphere)**(B)**	35.0M	35.0M	35.0M
GOES Satellite-derived atmospheric moisture profiles**(B)**	17.5M	17.5M	17.5M

(B) NOAA Budget Submission

Proposed New Performance Measures

Percent of quantitative environmental products required by NWS Numerical Weather Prediction operations delivered within 3 hours of observation

Percent of GOES satellite image products delivered to NWS Field Forecast Offices within 5 minutes of observation

Percent of non-NOAA satellite data/products received on time and delivered by customer deadlines

Percent of environmental hazard events analyzed and reported to NWS within 1 hour

Volume of NOAA satellite active archive data available for on-line access and distribution vs. the volume of data sets delivered (terabytes)

Average time between initial detection of distress signal and notification to the rescue center

Number of unique applications or users requiring NOAA satellite Data Collection System (DCS) capability

Transfer of remote sensing technology-number of refereed papers, technical reports, training sessions and conference presentations

Number of new or improved satellite remote sensing products developed and research data sets produced

1.3.3 & 1.3.4 Milestones and Activities

ADVANCE SHORT-TERM WARNING AND FORECAST SERVICES

- Conduct, with NASA, a science and applications requirements definition workshop to formulate a joint Global Tropospheric Wind Sounder mission (3/01) [ORA-Yoe]
- Complete readiness of NOAA-16 polar temperature (ATOVS) and moisture (AMSU-B) sounding systems for operational implementation (3/01) [ORA-Drahos]
- Implement DMSP SSM/I 85 GHz ice motion product (5/01) [OSDPD-Benner]
- Establish a Commercial Remote Sensing Federal Advisory Committee (6/01) [IA-Wooldridge/Stryker]

- Complete the 3.9um cloud drift winds processing system; deliver to operations (6/01) [ORA-Daniels]

- Begin operational data collection (GOES DCS) from faster speed/high data rate transmitters (7/01) [OSDPD-Metcalf]

- Conduct a commercial remote sensing market study in conjunction with ITA and TA (9/01) IA-Wooldridge]

- Develop an experimental, real-time system for processing NASA Atmospheric Infrared Sounder (AIRS) data for distribution to NWS and other major forecast centers (9/01) [ORA-Goldberg]

IMPLEMENT SEASONAL TO INTERANNUAL CLIMATE FORECASTS

- Complete letters of intent to include NOAA in a cooperative follow-on Jason altimetry cooperation with NASA, the French Space Agency and EUMETSAT (3/01) [IA-Masters/Marzin]

PREDICT AND ASSESS DECADAL-TO-CENTENNIAL CHANGE

- IPCC 2001 WG1 Report, Summary for Policymakers and Technical Summary, approved at IPCC WG1 Ministerial Meeting and US National Assessment approved by NSTC (2/01) [NCDC -Karl]

SUSTAIN HEALTHY COASTS

- Complete extension of RADARSAT-1 Memorandum of Understanding with Canadian Space Agency and NASA (12/00) [IA-Stryker/Beckman]

- Recommend and/or demonstrate GOES-SST products for use by NCEP (3/01) [ORA-Maturi]

1.4.0 Ocean Remote Sensing / SHC

1.4.1 Objectives

NOAA is developing a multi-disciplinary, multi-platform coordinated program of satellite ocean remote sensing. Data from NOAA and non-NOAA environmental satellites will be used to provide operational sensing of the US coastal and global ocean. Data will be acquired, processed and distributed for use by NOAA, other Federal agencies, state, local, and academic and educational users.

1.4.2 Performance Measures

	1999 Actual	2000 Estimate	2001 Estimate
Number of RADARSAT ice products **(B)**	2,700	3,000	3.200
Number of ocean color scenes available to CoastWatch nodes **(B)**	1,500	1,500	1,500
Number of CoastWatch users **(B)**	2,200	3,200	4,200
Number of new CoastWatch product lines added **(B)**	0	2	0
Number of new coastal hazards types supported **(B)**	0	0	2
Number of new coastal hazards products/ services developed and available	0	0	3
Number of derived ocean products (AVHRR CoastWatch) **(B)**	288K	288K	288K

(B) NOAA Budget Submission

Proposed New Performance Measures

Number of improved resolution satellite ocean remote sensing application products developed

Number of ocean remote sensing education/outreach activities undertaken

Number of CoastWatch users

Number of derived ocean products

1.4.3 & 1.4.4 Milestones and Activities

- Commence operational NOAA Ocean Color Validation System for SeaWiFS data (6/01) [ORA-Brown]
- Memorandum of Understanding signed establishing U.S.-Australia Coral Reef Virtual Laboratory (9/01) [ORA-Strong / IA-Sessing]
- Complete second phase of the Joint NESDIS, NWS, NMFS, U.S. Coast Guard and State of Alaska SAR Demonstration Project (9/01) [ORA-Clemente-Colon/Pichel]

1.5.0 Environmental Data Management Services / ISICF, DEC-CEN, ASTWF, SHC, BSF

1.5.1 Objectives

The Environmental Data Management System (EDMS) provides worldwide environmental data and information products and services in the atmospheric, marine, solid earth, and solar-terrestrial sciences to meet the needs of users in commerce, industry, agriculture, science and engineering, the general public, and Federal, state, and local agencies. These products and services are used in decisions critical to the following: national economy; national defense; industrial productivity; energy development and distribution; world food supplies; public health, safety, and welfare; and development of natural resources. Environmental data management is becoming increasingly important due to the growing national and international focus on understanding the processes of global climate change.

1.5.2 Performance Measures

	1999 Actual	2000 Estimate	2001 Estimate
National climatic, oceanographic, & geophysical data base records maintained (billions of bytes)**(B)**	813,951	942,700	942,700
Records added (billions of bytes)**(B)**	188,863	188,863	188,863
Records converted from analog to digital format (millions of bytes) **(B)**	821,369	902,416	902,342
Public user requests processed **(B)**	4.0M	4.6M	5.3M
Scientific and academic requests processed **(B)**	600K	690K	795K
Library volumes maintained (thousands) **(B)**	1,723	1,726	1,752
Library volumes added (thousands) **(B)**	23	23	23
Bibliographic citations (thousands)**(B)**	7,179	7,323	7,470
Public user requests for library information **(B)**	17,000	17,200	17,200
Scientific and academic user requests for library information **(B)**	33,400	33,500	33,500

(B) NOAA Budget Submission

Proposed New Performance Measures

Average time to fill a data order offline

Records rescued (MB)

Amount of data available online (MB)

Amount of data delivered online (MB)

Proportion of billed orders filled online

Customer satisfaction

Data base records maintained (MB)

Public user requests processed offline and online

Scientific and academic requests processed

1.5.3 & 1.5.4 Milestones and Activities

IMPLEMENT SEASONAL TO INTERANNUAL CLIMATE FORECASTS

- Conduct WWW/GIS/Metadata workshop (11/00) [EIS-Diamond]
- Complete and implement Web accessible centralized NESDIS constituent database (3/01) [CIO-Eustis/Hostetler]
- Complete the capture of shoreline data from six-hundred topographic maps by vectorization (3/01) [EIS-Botluk]
- Prepare a definitive High Resolution Calibrated Nighttime Lights of the Contiguous U.S. database (6/01) [NGDC-Elvidge]
- Compile national GCOS Report for UNFCCC COP-7 Meeting (6/01) [EIS-Diamond]
- Complete the NESDIS Enterprise IT Architecture Technical Reference Model (TRM) (8/01) [CIO-Mairs]

- Implement direct electronic ingest of NEXRAD Level III products (8/01) [NCDC-Faas]
- Hold NESDIS/OAR/NODC Constituent Workshop on Ocean Products and Climate (9/01) [CIO-Hostetler]
- Create 10 Visualization B-Roll Videos - make available to NOAA PA for press conferences/AA events (9/01) [CIO-Eustis]

PREDICT AND ASSESS DECADAL-TO-CENTENNIAL CHANGE

- Release of proposed FGDC Metadata Protocol for Paleoclimate Data, version 1.0 (12/00) [NGDC-Anderson]
- Improve timeliness of monthly climate monitoring reports by 10 days (1/01) [NCDC-Lawrimore]
- Implement new Servicing Procedures for SRRS data with NWS (4/01) [NCDC-Steurer]
- Install and implement new WDC-Paleoclimatology mirror site in Mendoza, Argentina (6/01) [NGDC-Eakin]
- Complete World Ocean Database 2001, adding approximately 300,000 new temperature profiles (9/01) [NODC-Levitus]

ADVANCE SHORT-TERM WARNING AND FORECAST SERVICES

- Successor to ETOPO5, worldwide elevations and depths at 2 arc-minute intervals published on CD-ROM (6/01) [NGDC-Sloss]

SUSTAIN HEALTHY COASTS

- Provide Marine Protected Area Library website online (12/00) [NODC-Beattie]
- Implement the National Coastal Data Development Center (NCDDC) and host the Center dedication (6/01) [NODC-Barazotto]

- Begin partnership with Jackson State University to enhance NOAA's use of GIS technology (9/01) [NODC-Dantzler]

BUILD SUSTAINABLE FISHERIES

- Initiate DOC Aquaculture Information Center - part of Implementation Plan of the DOC Aquaculture Policy (3/01) [NODC-Beattie]

2.0 Budget/Resource Information

	Amount	FTE
FY 2001 Base	$ 570,927	
FY 2001 Enacted	641,961	
Change	+ 71,034	

(Section 2.5 provides a Line Item/Strategic Plan Element breakout)

- Proposed Transfers/Reprogrammings:

  None

- Add-ons/New Starts/Terminations:

Polar Orbiting System	+ 19,596
Geostationary System	+ 24,586
Global Disaster Information Network	+ 2,993
Adjust/Restore Base - Env'l Observing Svs	+ 82
Adjust/Restore Base - Data & Info. Svs	+ 1,037
Environmental Data Mgmt Modernization	+ 20
Ocean Remote Sensing	+ 6
Climate Reference Network	+ 1
Climate Data Base Modernization	+ 6,237
Global Winds Demonstration	+ 184
Nat'l Coastal Ocean Data Dev. Ctr.	+ 2,289
Regional Climate Centers	+ 352
Suitland Facility (FB4 Replacement)	+ 12,194
Center for Spatial Data Rescue	+ 2,495
CLASS	+ 1,995
NORC Rehabilitation (FB4 Rehabilitation)	- 3,033

2.1 Polar Orbiting System

	FY 00 Approp.	FY 01 Pres.Budget	FY 01 Enacted
NOAA K-N'	130,481	136,965	136,685
Polar Convergence	59,772	76,654	73,164
	190,253	213,619	209,849

- NOAA K-N' – NOAA-L was launched in September 2000.

- Polar Convergence - FY 2001 Enacted Budget reflects program requirements for the National Polar-orbiting Operational Environmental Satellite System (NPOESS). The first spacecraft must be ready to backup NOAA-N' in 2008.

2.2 Geostationary System

	FY 00 Approp.	FY 01 Pres.Budget	FY 01 Enacted
GOES I-M	75,570	58,615	58,487
GOES N-Q	109,032	232,209	231,701
	265,602	290,824	290,188

- GOES I-M - The FY01 Enacted Budget fully funds the GOES I-M program. GOES-L was launched in May 2000.

- GOES –Q - A fixed price spacecraft contract for GOES-N and GOES-O, with options for GOES-P and GOES-Q, was awarded in January 1998. The option for the ITT Imager and Sounder was exercised July FY 2000.

2.3 Environmental Observing Services

	FY 00 Approp.	FY 01 Pres.Budget	FY 01 Enacted
Base Funding	50,607	53,912	50,689
Global Winds Demonstration	2,311	0	2,495
Global Disaster Info. Net.	0	5,500	2,993
Ocean Remote Sensing	3,985	4,000	3,991
	56,903	63,412	60,168

- Environmental Observing Services (base funding) - $2,495K is provided to continue the Global Winds Demonstration Program, $3,991 to continue the Ocean Remote Sensing Program, and an increase in funding to begin the Global Disaster Information Network (GDIN) (+$2,993K).

2.4 Environmental Data Management Systems

	FY 00 Approp.	FY 01 Pres. Budget	FY 01 Enacted
Data & Info Services	23,908	26,754	24,945
Climate Data Base Modern.	9,429	5,200	15,666
Nat'l Coastal Ocean Data Dev. Center	3,698	0	5,987
Climate Reference Network	498	500	499
Regional Climate Centers	2,542	0	2,894
Env. Data Modernization	12,288	12,335	12,308
	52,363	44,789	62,299

- Data and Information Services - The FY 2001 Enacted Budget increased base funding by $1,037K. Also included in this line item are the following increases:
  - + $6,237 to expand the Climate Data Base Modernization Program
  - + $2,289 to continue the development of the National Coastal Data Development Center
  - + $352K to continue the NOAA cooperation with the Regional Climate Centers

- Environmental Data Management Modernization - The FY 2001 Enacted Budget fully funds the modernization effort at $12,308K.

2.5 Distribution of FY 2001 Appropriated Funds by Strategic Plan Elements

STRATEGIC PLAN ELEMENTS	FY01 Enacted Budget	FY 2001 BUDGET LINE ITEMS	FY01 Enacted Budget
ADVANCE SHORT-TERM FORECASTS			
Short-term Base Funding (sat) (inc GDIN)	56,177	Environmental Observing Svs.	56,177
Short-term Base Funding (data)	1,085	Data & Information Services	1,085
Complete NWS Mod--GOES I-M	58,487	Geostationary System--GOES I-M	58,487
Satellite Cont.-GOES N-Q	231,701	Geostationary System--GOES N-Q	231,701
Satellite Cont.-NOAA K-N'	136,685	Polar Orbiting System--NOAA K-N'	136,685
Satellite Cont.-NPOESS	73,164	Polar Orbiting System--NPOESS	73,164
SEASONAL TO INTERANNUAL FORECASTS			
Data & Information Services	17,268	Data & Information Services	17,268
Climate Database Modernization	15,666	Climate Database Modernization	15,666
Env. Data Mgmt. Modernization	9,813	Env. Data Mgmt. Modernization	9,813
Natl Coastal Data Dev. Center	5,987	Natl Coastal Data Dev. Center	5,987
Center for Spatial Data Rescue	2,495	Center for Spatial Data Rescue	2,495
DECADAL TO CENTENNIAL CHANGES			
Data & Information Services	3,219	Data & Information Services	3,219
Climate Reference Network	499	Climate Reference Network	499
Regional Climate Centers	2,894	Regional Climate Centers	2,894
Env Data Mgt Mod (NVDS)	2,495	Env Dat Mgt Mod (NVDS)	2,495
CLASS	1,995	CLASS	1,995
SUSTAIN HEALTHY COASTS			
Data & Information Svs (Habitat	2,171	Data & Information Services	2,171
Ocean Remote Sensing	3,991	Ocean Remote Sensing	3,991
RECOVER PROTECTED SPECIES			
Assess Status of Prot. Species	1,202	Data & Information Services	1,202
INFRASTRUCTURE			
Suitland Facility	14,967	Suitland Facility	14,967
TOTAL	$641,961	TOTAL	$641,961

FUNDING SUMMARY

	FY 2000 APPROP.	FY 2001 PRES.BUDGET	FY 2001 ENACTED
Polar System	190,253	213,619	209,849
Geostationary Sys.	265,602	290,824	290,188
Environmental Obs. Svs.	52,918	59,412	56,177
Ocean Remote Sensing	3,985	4,000	3,991
TOTAL ENV. OBS. SYS.	512,758	567,855	560,205
Data & Info Services	37,534	32,454	49,592
Env. Data Mgmt. Mod.	12,288	12,335	12,308
Regional Climate Centers	2,542	0	2,894
TOTAL ENV. DATA MGT. SYS.	52,363	44,789	64,794
NORC Rehabilitation	3,033	0	0
Suitland Facility	2,773	0	14,967
CLASS			1,995
TOTAL NESDIS	570,927	612,644	641,961

3.0 Management Issues

3.1 FTE/Streamlining Plans

NESDIS anticipates no significant change in FTE usage and staying within our ceiling in FY 2001. The estimated FTE requirements by quarter for FY 2001 are:

	FTE Usage per Quarter	Cumulative for the FY
1st Quarter	215	215
2nd Quarter	215	430
3rd Quarter	212	642
4th Quarter	218	860

3.2 Organizational Issues

- Mitigation of Operational and Health Risks in Federal Building No. 4

  Continuation of operations and health risk mitigation for NESDIS missions and personnel located in Federal Building No.4, Suitland Federal Center. NESDIS, NOAA Facilities and GSA continue to work collaboratively to enforce the Asbestos Maintenance and Operation Plan and prevent or respond to incidents of potential asbestos exposure, power failures or roof or water pipe leaks to prevent disruption to NOAA critical satellite operation and data and information distribution missions. During FY 2001, the Satellite Operations Control Center will relocate into its newly completed, asbestos-free space. GSA will complete roof repairs and will continue to provide bottled water. NOAA Facilities will continue to provide Industrial Hygienist monitoring support.

- Design and Construction of the NOAA Satellite Operations Facility at the Suitland Federal Center

  GSA will award the architect-engineer design contract for the facility in January 2001. NOAA will continue to work through the DOC, OMB and Congress to obtain funding for the construction of the facility which is scheduled to begin in early FY 2002 and be completed in early FY 2004. The joint NESDIS, NOAA, GSA project team will complete the project memorandum of understanding by October 2000 and will support the design effort.

- Replacement of the NOAA Science Center

  NESDIS, working with NWS, OAR, and OFA has begun the planning process for the leased World Weather Building, Camp Springs, Maryland. NOAA is working with GSA, which was authorized $500,000 in its FY 2001 appropriation to perform a plan of requirement, site analysis and to develop a prospectus for a proposed replacement facility. These efforts should begin in February 2001 and be completed by June 2001. They will guide NOAA in its planning process.

- Continuation of Successful Personnel Demonstration Project

  NESDIS will continue its participation in the Department's Personnel Demonstration Project. The Project's initial evaluation report, approved by the Office of Personnel Management, determined that it was fully meeting its implementation objectives. During FY 2001, NESDIS will work with the other Project participants in the evaluation of the third year's results and in the completion of the 3rd Year Evaluation Report.

3.3 Diversity

NESDIS will support all aspects of the NOAA and NESDIS Diversity Plan to emphasize and foster a positive work environment with opportunities for advancement, training and challenges for all. NESDIS will continue to educate the workforce about managing diversity, understanding differences in employees' behavior, role of the organizational assessment and the culture change required to manage NESDIS' internal and external diversity. Specific milestones are:

- Each Line, Center, and Staff Office will ensure managing diversity critical element is included in each supervisor and manager's performance plan. (12/00) (Line, Center and Staff Offices)

- Each Line, Center, and Staff Office will participate in and support the NOAA Diversity Conference. (12/00) (Line, Center and Staff Offices)

- Each Line, Center, and Staff Office will hold an annual town meeting which will include presentation of affirmative action, and managing diversity activities. (6/01) (Line, Center and Staff Offices)

- Develop a NESDIS Diversity Web site to enhance communication and provide employees with access to NESDIS Diversity information. (06/01) (MOAO and NODC).

- Publish the 2002-2003 Diversity Action Plan. (09/01) (Line Center and Staff Offices and MOAO)

3.4 Affirmative Action

NESDIS supports all aspects of the NOAA and NESDIS Affirmative Employment Plan and emphasizes recruitment efforts and hiring practices independent of age, class, ethnicity, gender, sexual orientation, disability, race, religion, language, or differences. NESDIS will foster a positive work environment with opportunities for advancement, training and challenges for all.

NESDIS will continue its community outreach efforts with community organizations and schools promoting awareness of NOAA and its mission by encouraging employees participation in science fairs, career fairs, other school and community events, and supporting workshops for minority teachers.

- Submit the following Affirmative Employment Accomplishment Report to the EEO Commission: People with Disabilities and Disabled Veterans. (12/00) (MOAO-Jackson)

- Submit the Affirmative Employment Report and Plan for Women and Minorities to the EEO Commission. (03/01) (MOAO-Jackson)

- Each Line, Center, and Staff Office will participate in and support the NOAA EEO Conference. (06/01) (Line, Center, and Staff Offices)

- Each Line, Center, and Staff Office will identify their FY 2002 employment requirements. (06/01) (Line, Center and Staff Offices)

- Develop an FY 02 NESDIS Recruitment Program. (09/01) (MOAO, HRMO, and Line, Center and Staff Offices)

3.5 Employee Development and Training

NESDIS is committed to managing diversity. The organization will continue to capitalize on the unique talents of everyone. This commitment is not new, but builds on the traditions of fairness and equality already established in NESDIS staff, offices and centers. NESDIS will continue to provide training and retraining for all employees up to 1.5 percent of the salary and benefits budget.

- Conduct NESDIS Employee Orientation Program. (This is a continuing program) (MOAO and NODC)
- Each Line, Center, and Staff Office will begin to develop Individual Development Plans for employees. (03/01) (Line, Center and Staff Offices)
- Complete new managers/employee training on the Demonstration Project. (06/01) (MOAO)
- Complete a NESDIS annual evaluation of the Demonstration Project. (06/01) (Line, Center and Staff Offices and MOAO)

3.6 Environmental Compliance

NESDIS continues to be a committed participant in the NOAA Environmental Compliance and Safety Program. The Director, Management Operations and Analysis Office serves as manager of the NESDIS program. Facilities Environmental Compliance Officers (FECOs) are designated at each facility and an internal environmental compliance program reporting network has been established. NESDIS assures that all FECOs have up- to- date training and are aware of new regulations and guidelines. NESDIS has implemented the Chemical Inventory Management System (CIMS) at the Fairbanks, CDA as part of the NOAA Pilot. NESDIS plans to deploy CIMS at the Wallops Island CDA as part of a later phase of the NOAA program.

Three facilities were audited in FY00, Asheville, NC, Fairbanks, AK, Wallops Island, VA. Follow-up on audit findings to correct deficiencies is already underway and progress will be reported at the NOAA Quarterly Reviews.

4.0 Other Information

4.1 Legislative Issues

None

4.1.1 Congressional Actions

The NOAA Authorization Act of 1992 requires the Secretary of Commerce to provide an assessment of the adequacy of NOAA's environmental data and information systems and a comprehensive plan for their modernization and improvement. The Department originally submitted the report in October 1993 to the Senate Committee on Commerce, Science, and Transportation and the House Committee on Science, Space and Technology. This report is updated biennially.

In late November 2000, Norman Y. Mineta, Secretary for the Department of Commerce, plans to send to Congress the National Oceanic and Atmospheric Administration's (NOAA) Report to Congress on Data Management, Treasures at Risk. This document was produced in compliance with Public Law 102-567, the NOAA's Fiscal Year 1992 Authorization Act.

NOAA spends almost a billion dollars each year collecting environmental data from around the world and from space in support of its mission. Throughout the 1990s, the NOAA archives have experienced a steady growth in digital data, more than quadrupling in volume by 1999 to more than 760 terabytes. By the Year 2005, NOAA's holdings will be nearly 5 times this amount, growing to almost 20 times over the next 15 years.

For the 21st Century, NOAA envisions its data and information products to be available to the Nation as part of a national decision support system for the purpose of:

- Saving lives and protecting property
- Promulgating public policy
- Managing and conserving living marine resources
- Enhancing the economic prosperity and quality of life in the United States.

With the necessary technological infrastructure required to keep pace with the immense data and information management demands of the 21st Century, NOAA will be able to manage environmental data throughout the entire data life cycle.

NOAA plans to ensure that these national treasures will no longer be at risk.

Section 4.2 Plans for Working with Minority Serving Institutions

NESDIS will continue to work with and expand activities with Minority Serving Institutions (MSI). NESDIS will take the lead for establishing the Remote Sensing Cooperative Service Center and will support the other centers and MSI initiatives

The NESDIS Office of Research and Applications (ORA) has two competitive grant programs: (1) Using Satellite Data to Study Local and Regional Phenomena, and (2) the Ocean Remote Sensing Program. Both solicit applications by publishing an announcement in the Federal Register which encourages the participation of MSIs. The data grants program is designed to introduce satellite data/research to educational institutions not currently involved in our program, i.e., current recipients are not eligible to apply. In FY 2000 one of four recipients of a data grant was an MSI..

- Implement the FY01 Graduate Scientist Program and select participants (05/01) [Haskins]
- Graduate FY00 NOAA Graduate Scientist Program participants (06/01) [Haskins]
- Support NOAA's Junior Fellowship Program (06/01) [MOAO-Jackson]
- Conduct a Satellite Remote Sensing Educators Training Workshop/Conference at Florida State University (08/01) [MOAO-Jackson]
- Establish a Remote Sensing Cooperative Science Center (09/01) [ORA-Colton]
- Establish cooperative arrangements for exchange of NESDIS employees and MSI faculty for training and academic development at the MSI institutions (ongoing) [ORA-Colton]
- Continue to provide science talks and other outreach at MSIs (ongoing)

4.3 Validation and Verification Activities

NESDIS recognizes the need to revise and update its performance measures to correspond with the requirements of the Government Performance and Results Act (GPRA). Performance measures are derived from the NOAA strategic planning process and from within the individual NOAA operating entities. NESDIS acknowledges and accepts its responsibilities for performance measures enumerated in the NOAA Implementation Plan.

I. Satellite Products

NESDIS produces thousands of environmental satellite products every day, such as cloud imagery, sea surface temperatures, ozone, and wind velocities. NESDIS routinely measures on-time delivery statistics for each product. These performance measures are tracked on a daily, monthly, and yearly basis, measuring not only the number of products produced, but product quality as well. Where possible, NESDIS uses conventional observational data and customer feedback to validate the quality of satellite derived products. Product numbers and accuracy may be affected by satellite health and sensor performance.

NESDIS has an on-going program to validate the accuracy of satellite products against ground truth observations. In this program, satellite derived products are compared with collocated, coincident ground-based measurements. Examples include: satellite SST observations verified against oceanic buoy SST observations; satellite wind observations and temperature and moisture soundings verified against radiosonde measurements; satellite ozone measurements verified against Dobson instrument measurements of total ozone amount and ozonesonde observations of ozone profiles; satellite aerosol optical depths against sun photometer measurements. NESDIS scientists are in frequent contact with users who provide direct feedback on products and services.

NESDIS works closely with its other NOAA partners to ensure that its products meet NOAA requirements for quality and timeliness. NESDIS and NWS participate in satellite product and service development, improvement, maintenance, and quality control through the NESDIS Satellite Products and Services Review Board (SPSRB). The SPSRB also keeps track of the timeliness of satellite products delivered to AWIPS, a major component of NWS Modernization. The SPSRB oversees the activities of eight Products and Services Oversight Panels, which consist of leading scientists in remote sensing from NOAA, NASA, DOD, and the educational community. These panels work on the latest scientific problems in remote sensing in order to deliver state-of-the-art products and services from NOAA satellites.

At the U.S. Mission Control Center for Search and Rescue Satellite Aided Tracking, NESDIS keeps track of all registered 406 MHz beacons in order to help the U.S. Coast Guard more quickly find mariners in distress. NESDIS keeps a daily count of the hundreds of U.S. citizens

rescued each year as a result of the NESDIS-satellite based Search and Rescue program.

Research and development activities are peer reviewed prior to publication in the scientific literature. Scientists present their results at scientific conferences where they obtain feedback from other experts in the field and satellite data users. Workshops are organized to interact with customers and broaden the applications of satellite data. In addition, NESDIS scientists closely monitor analyses conducted by NCEP to evaluate the impact of satellite data on weather predictions. In promotion actions for senior scientists, NESDIS scientists use the Science Citation Index as one measure of R&D quality and productivity.

II. Data Services

NOAA's National Data Centers are a vital resource for oceanographic, geophysical, and atmospheric data and information that are used in every economic and social section of the world. For the past few years, the three Data Centers have been implementing major changes in an effort to meet evolving national mission requirements. At the same time, the Data Centers have had to develop efficiencies of operations to cope with exponentially increasing volumes of new data and increasing numbers of users while facing serious budget constraints that impact the operating environment. The overarching goal is to develop an efficient NOAA customer-oriented virtual data system that provides seamless access to environmental data and information without regard to its physical or organizational location, underlying discipline, or storage form.

The single combined NNDC On-Line Store was implemented in FY 2000 which allows customers to order products from all three data centers in a single on-line store order. The NODC, as the Data Center that maintains the NOAA Library, tracks books and journals and also bibliographic citations.

Another "user friendly" method to validate and verify quality of services and customer satisfaction continues via on-line services. The Data Center home pages (www.ncdc.noa.gov, www.nodc.noa.gov, www.ngdc.noaa.gov), the Visualization Laboratory home page (www.nnvl.noaa.gov) and the NOAA home page (www.noaa.gov) invite customers to send comments, make suggestions, or request information from the various webmasters via electronic mail. Typically, customer comments and requests to the NOAA home page average 2-4 per day. Comments from customers are reviewed and responded to on a regular basis. On-line users voluntarily register to be added to the NGDC mail lists and provide feedback in the comments field. This activity averages 2-3 new users per day. The e-mail option to contact info@ngdc.noaa.gov on-line from the NGDC web pages is also active with 5-10 accesses per day. This provides users with another easy method of expressing their satisfaction and to let us know what our quality of service is.

Interaction with customers of NESDIS data services also occurs at conferences, professional meetings, and exhibits. For example, interactions at places such as the American Geophysical Union Annual Meeting and the American Meteorological Society Annual Meeting provide the opportunity to gather comments and suggestions in an informal way.

The National Climatic Data Center (NCDC) will host workshops during FY 01 which will be directed toward specific user classes to gain feedback from these customers. Feedback is also routinely provided through NCDC's customer service representatives who respond to some 75,000 inquiries annually and through NCDC's web site's user comments section. Feedback from specific Web pages such as the monthly climate monitoring reports is encouraged. Feedback to science/research-related milestones, such as the production of supplements to the Climate Atlas is also provided via NCDC presentations at national and international scientific meetings and workshops and the writing of articles for peer-reviewed journals. The implementation of new servicing procedures involving, for example, NEXRAD Level III products from the HDSS, will include a capability for users to contribute comments. The IPCC and US National Assessment work each has numerous review levels before publication.

The National Oceanographic Data Center (NODC) received approval from the Office of Management and Budget (OMB) to add two new customer feedback links to its website. The Data Applications Comments link provides information about how customers intend to use the data they download; and the Feedback link allows customers to contact NODC regarding web issues involving navigation, design, user interface problems, etc. During the brief time that these links were active in FY 00, NODC received over a hundred responses. In FY 01, NODC anticipates over 1,000 responses. The results of this feedback will be carefully reviewed and used to improve our online services.

APPROVED:

/signed/ Gregory W. Withee

Gregory W. Withee
Assistant Administrator for Satellite
and Information Services

February 7, 2001

(date)

APPROVED:

/signed/ Scott B. Gudes

Scott B. Gudes
Acting Under Secretary
for Oceans and Atmosphere

February 14, 2001

(date)